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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/518,089

12/16/2004

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IRD-0002

3748

23353 7590 03/15/2010
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EXAMINER

ANTONIENKO, DEBRA L

ART UNIT

PAPER NUMBER

3689

MAIL DATE

DELIVERY MODE

03/15/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/518,089	Applicant(s) TANIGAWA, HIDEKAZU	
	Examiner DEBRA ANTONIENKO	Art Unit 3689	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-5 and 8-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-5 and 8-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This is a Final Office Action in response to communications received 1 December 2009, wherein:
- Claims 1, 2, 6, 7, and 14-16 have been previously cancelled;
- Claims 3-5, 8-10, and 13 have been amended; therefore,
- Claims 3-5, and 8-13 are pending.

Response to Amendment

2. Amendment to the original specification for paragraph beginning at page 7, line 5 is accepted.
3. Amendments regarding the semi-colon and the acronym MPU are sufficient to overcome the claim objections. Objection regarding the improper grammar is maintained. See below.
4. Amendments regarding "permits a computer to implement" in claims 3-5 are sufficient to overcome the 35 USC § 112, second paragraph, rejection.
5. Amendments to claims 10 and 13 are sufficient to overcome the 35 USC § 101 rejections.

Response to Arguments

6. Rejections under 35 USC 112, first paragraph, for claims 3, 8, and 11 are withdrawn. Rejections for claims 5, 10, and 13 are maintained. See below.
7. As to Applicant's remark, "The Office Action **fails** to identify the language within claim 3, 8, or 11 that is specifically complained of," the rejection is reproduced:

Claims 3, 8, and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is vague and indefinite how the words for the preferred embodiment are determined. In other words, it is unclear what a preferred embodiment encompasses. For example, Applicant uses the language preferred embodiment in the instant specification. Applicant then lists several embodiments. Are all of the embodiments preferred embodiments or is only one embodiment preferred? (Emphasis added.)

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Examiner notes that the rejection clearly identifies the language within the claims that is being rejected, namely, preferred embodiment. As Applicant has not addressed the rejection, it is maintained. See below.

8. As to Applicant's remarks regarding the limitation of *a patent value calculation step of calculating a patent value using the following formula: {the number of words for preferred embodiment/ the number of words for claims}*, Examiner maintains obviousness rejection. Applicant argues that the statement of obviousness that *it would have been obvious to one of ordinary skill in the art at the time of the invention to use different ratios in order to be able to provide a comprehensive quantifiable analysis* is without support and conclusory. Applicant also notes that *[t]o have a reasonable expectation of success, one must be motivated to do more than merely to vary all parameters or try each of numerous possible choices until one possibly arrived at a successful result, where the prior art gave either no indication of which parameters were critical or no direction as to which of many possible choices is likely to be successful*. Pfizer Inc. v. Apotex Inc., 82 USPQ2d 1321, 1333 (Fed. Cir. 2007).

Barney teaches *a statistical patent rating method and system for rating or ranking patents based on certain selected patent characteristics or "patent metrics."* Such patent metrics may include any number of quantifiable parameters that directly or indirectly measure or report a quality or characteristic of a patent.... Specific patent metrics may include, for example, without limitation, the number of claims, number of words per claim, number of different words per claim, word density (e.g., different-words/total words), length of patent specification... claim type (i.e., method, apparatus, system), etc. (column 11, lines 37-59). (Emphasis added.) Barney clearly gives an indication that word count as a parameter is of high importance. Barney also clearly gives direction in the formula for word density. This is calculating a comparative relation

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between two word count parameters just as the claimed formula does. One skilled in the art would readily find it apparent to vary the numerator or denominator in a ratio. Moreover, Barney teaches a statistical patent rating/ranking based on patent metrics or measurements. Statistical measurements are structured and with methodology. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use different ratios in order to be able to provide a comprehensive quantifiable analysis. Examiner asserts that Barney does indeed give support to the statement of obviousness. Therefore, the statement is not conclusory and is not with hindsight.

Furthermore, as stated previously, Examiner notes that *it must be remembered that the "obviousness" test of § 103 is not one which turns on whether an invention is equivalent to some element in the prior art but rather whether the difference between the prior art and the subject matter in question "is a difference sufficient to render the claimed subject matter unobvious to one skilled in the applicable art * * *."* *Dann v. Johnston*, 425 U.S. 219, 189 USPQ 257 (1976). Examiner further notes that *the mere existence of differences between the prior art and an invention does not establish the invention's nonobviousness. The gap between the prior art and respondent's system is simply not so great as to render the system nonobvious to one reasonably skilled in the art.* *Ibid.* Barney clearly gives an indication that word count as a parameter is of high importance. Barney also clearly gives direction in the formula for word density. This is calculating a comparative relation between two word count parameters just as the claimed formula does. Barney teaches rating/ranking patents using quantifiable parameters. Therefore, that Barney's example does not state the exact same ratio does not effectively serve to patentably distinguish the claimed invention over the prior art. The gap between the prior art and respondent's system is simply not so great as to render the system nonobvious to one reasonably skilled in the art.

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9. As to Applicant's remarks regarding claims 4, 9, and 12, Examiner maintains obviousness rejection. Examiner clarifies that Barney at column 20, lines 18-28 and Figure 4 is not referenced to teach *the feature of calculating a patent value using the smallest number of elements composing one claim*. Barney discloses counting the number of elements in claims such that elements are words or word phrases. Here, Barney discloses generally using the "word count" of claims, smallest to largest, to illustrate statistical relationships.

Barney discloses specific element counts used as quantifiable parameters such as the frequency or infrequency of certain word usage relative to the general patent population or relative to a defined sub-population of patents in the same general field. For example, each word and/or word phrase in a patent claim (and/or patent specification) could be assigned a point value according to its frequency of use... Uncommon words or word phrases could receive relatively high point values. The total point score for each claim could then be taken as an indication of its relative breadth or narrowness based on the total number and statistical prevalence of each of the words contained in the claim. Optionally, different amounts of points can be accorded to claim words or word phrases based on whether or not they also appear in the patent specification. Multiple claims and/or patents could also be combined into a single analysis (column 11, line 38 – column 12, line 22). Analyzing the frequency or infrequency of certain words and calculating a total score for each claim certainly satisfies the limitation of *calculating a patent value using the smallest number of elements composing one claim*. That different words to describe the same concept does not effectively serve to patentably distinguish the claimed invention over the prior art.

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10. As to Applicant's remarks regarding the limitation of a *patent value calculation step of calculating a patent value using the nesting level as a parameter so that the deeper the nesting level the higher the patent value*, Examiner maintains obviousness rejection. Figures 4 and 5 of Newman clearly indicate "nesting levels." It is unclear how the nesting level is used as a parameter to indicate the value of a patent. Using Figure 5 as an example, it appears that Applicant is claiming novelty in that the patent with such a claim tree has a value of "3" and is now a "parameter." The instant specification states that *a specification having the deepest hierarchy is assigned the maximum value on the scale. This is based on the view that the deeper a claim hierarchy is, the more deeply speculated the inventive idea is (i.e., the inventive idea is fully devised from multiple aspects), and hence the higher its patent value ([0122])*. The instant specification does not offer substantiation for this view. It is unclear how the nesting level is used as a parameter to indicate the value of a patent. In other words, how is it that a patent is more valuable if it has a higher nesting value? Therefore, calling the level a patent value and parameter does not effectively serve to patentably distinguish the claimed invention over the prior art.

Claim Objections

11. Claims 5, 10, and 13 are objected to because of the following informalities: At the end of the first clause, "number of each of claims" is improper grammar. Examiner suggests changing the claim language to "... obtaining a parent claim number of each claim." Appropriate correction is required.

Claim Rejections - 35 USC § 112

12. The following is a quotation of the **first** paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

13. Claims 5, 10, and 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

MPEP 2163 IA notes that

the issue of a lack of adequate written description may arise even for an original claim when an aspect of the claimed invention has not been described with sufficient particularity such that one skilled in the art would recognize that the applicant had possession of the claimed invention. The claimed invention as a whole may not be adequately described if the claims require an essential or critical feature which is not adequately described in the specification and which is not conventional in the art or known to one of ordinary skill in the art. (Emphasis added.)

This appears to be the case with the limitation of *a patent value calculation step of calculating a patent value using the nesting level as a parameter so that the deeper the nesting level the higher the patent value* is not adequately described in the instant specification.

Applicant offers excerpts from the instant specification (pages 16-19 of Response dated 1 December 2009) stating that the “*depth of claim nesting level*” indicates the deepest level of a claim hierarchy represented by a claim tree (page 16) and a specific and a specification having the deepest hierarchy is assigned the maximum value on the scale. This is based on the view that the deeper a claim hierarchy is, the more deeply speculated the inventive idea is (i.e., the inventive idea is fully devised from multiple aspects), and hence the higher its patent value (page 18). However, the instant specification does not provide substantiation for this view.

Applicant offers from the instant specification *the invention expansion level (f) is obtained through the use of a formula such as $f = \text{“number of claims”} * 0.5 + \text{“depth of claim nesting level”} *$*

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$0.3 + \text{"number of claim categories"} * 0.2$ (page 17). Here, the depth of claim nesting level is used as a parameter as claimed. However, how does the nesting level used as such a parameter indicate the value of a patent? Examiner asserts that the instant specification does not provide sufficient guidance and direction to enable one skilled in the art to make or use the invention without undue experimentation.

Mahurkar v. C.R. Bard, Inc., 79 F.3d 1572, 1578, 38 USPQ2d 1288, 1291 (Fed. Cir. 1996) (determining that the invention will work for its intended purpose may require testing depending on the character of the invention and the problem it solves). See MPEP 2163 II (a).

In other words, how is it that a patent is more valuable if it has a higher nesting value? This is an essential feature and is not adequately described in the instant specification. Therefore, the claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

14. The following is a quotation of the **second** paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

15. Claims 3, 8, and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is vague and indefinite how the words for the preferred embodiment are determined. In other words, it is unclear what a preferred embodiment encompasses. For example, Applicant uses the language preferred embodiment in the instant specification. Applicant then lists several embodiments. Are all of the embodiments preferred embodiments or is only one embodiment preferred?

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. **Claims 3-5 and 8-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Barney et al., U.S. Patent Number 6,556,992 B1 (hereinafter Barney).

Regarding **Claims 3, 8, and 11**, Barney teaches, respectively, a program product stored in a computer readable medium, a data processing device, and a method comprising the following steps of: a specification analysis step of analyzing a specification, so as to obtain a number of words for preferred embodiment and a number of words of claims (column 11, lines 38-59; column 12, lines 7-23; *length of patent specification*); and a patent value output step of outputting said patent value (Figure 11).

Barney teaches *a statistical patent rating method and system for rating or ranking patents based on certain selected patent characteristics or "patent metrics."* Such patent metrics may include any number of quantifiable parameters that directly or indirectly measure or report a quality or characteristic of a patent.... Specific patent metrics may include, for example, without limitation, the number of claims, number of words per claim, number of different words per claim, word density (e.g., different-words/total words), length of patent specification... *claim type* (i.e., *method, apparatus, system*), etc. (column 11, lines 37-59). (Emphasis added.) Barney clearly gives an indication that word count as a parameter is of high importance. Barney also

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clearly gives direction in the formula for word density. This is calculating a comparative relation between two word count parameters just as the claimed formula does. One skilled in the art would readily find it apparent to vary the numerator or denominator in a ratio. Moreover, Barney teaches a statistical patent rating/ranking based on patent metrics or measurements. Statistical measurements are structured and with methodology. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use different ratios in order to be able to provide a comprehensive quantifiable analysis.

Furthermore, Examiner notes that *it must be remembered that the "obviousness" test of § 103 is not one which turns on whether an invention is equivalent to some element in the prior art but rather whether the difference between the prior art and the subject matter in question "is a difference sufficient to render the claimed subject matter unobvious to one skilled in the applicable art * * *."* *Dann v. Johnston*, 425 U.S. 219, 189 USPQ 257 (1976). Examiner further notes that *the mere existence of differences between the prior art and an invention does not establish the invention's nonobviousness. The gap between the prior art and respondent's system is simply not so great as to render the system nonobvious to one reasonably skilled in the art.* Ibid. Barney clearly gives an indication that word count as a parameter is of high importance. Barney also clearly gives direction in the formula for word density. This is calculating a comparative relation between two word count parameters just as the claimed formula does. Barney teaches rating/ranking patents using quantifiable parameters. Therefore, that Barney's example does not state the exact same ratio does not effectively serve to patentably distinguish the claimed invention over the prior art.

Regarding **Claims 4, 9, and 12**, Barney teaches, respectively, a program product stored in a computer readable medium, a data processing device, and a method comprising the following

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steps of: an element obtaining step of obtaining elements based on a specific letter string in a specification; a specification analysis step of analyzing said specification so as to obtain the smallest number of elements composing one claim; a patent value calculation step of calculating a patent value using the smallest number of the elements composing one claim obtained by the specification analysis step, as a parameter; and a patent value output step of outputting said patent value.

Barney discloses counting the number of elements in claims such that elements are words or word phrases. Barney discloses generally using the “word count” of claims, smallest to largest, to illustrate statistical relationships (column 20, lines 18-28; Figure 4). Barney discloses specific element counts used as quantifiable parameters such as the frequency or infrequency of certain word usage relative to the general patent population or relative to a defined sub-population of patents in the same general field. For example, each word and/or word phrase in a patent claim (and/or patent specification) could be assigned a point value according to its frequency of use... Uncommon words or word phrases could receive relatively high point values. The total point score for each claim could then be taken as an indication of its relative breadth or narrowness based on the total number and statistical prevalence of each of the words contained in the claim. Optionally, different amounts of points can be accorded to claim words or word phrases based on whether or not they also appear in the patent specification. Multiple claims and/or patents could also be combined into a single analysis (column 11, line 38 – column 12, line 22). Analyzing the frequency or infrequency of certain words and calculating a total score for each claim certainly satisfies the limitation of *calculating a patent value using the smallest number of elements composing one claim*. That different words to describe the same concept does not effectively serve to patentably distinguish the claimed invention over the prior art.

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18. **Claims 5, 10, and 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Barney et al., U.S. Patent Number 6,556,992 B1 (hereinafter Barney) in view of Newman, U.S. Patent Number 5,774,833 (hereinafter Newman).

Regarding **Claims 5, 10, and 13**, Barney does not teach, respectively, a program product stored in a computer readable medium, a data processing device, and a method comprising the following steps of: a parent claim number obtainment step of obtaining a parent claim number of each of claims; a parent-dependent relationship information obtainment step of obtaining information of parent-dependent relationships between the claims; a claim hierarchy obtainment step of obtaining a claim hierarchy that relates the claim number and the parent claim number; a nesting level obtainment step of obtaining a nesting level that is the deepest level of the claim hierarchy; a patent value calculation step of calculating a patent value using the claim nesting level as a parameter so that the deeper the nesting level the higher the patent value; and a patent value output step of outputting said patent value.

However, Newman discloses *construction of a claim dependency "tree" which identifies each independent claim and each claim dependency, and verification of correct independent and dependent claim ordering (as prescribed by the Manual for Patent Examining Procedure (MPEP) published by the U.S. Patent and Trademark Office)* (column 9, line 63 – column 10, line 49; Figures 4 and 5). Newman further discloses the nesting levels by use of a table with columns (Figure 5). Barney discloses claims and whether or not they are independent or dependent (Figure 11). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Barney with that of Newman to include claim trees in order to further disclose claim relationships.

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Figures 4 and 5 of Newman clearly indicate “nesting levels.” It is unclear how the nesting level is used as a parameter to indicate the value of a patent. Using Figure 5 as an example, it appears that Applicant is claiming novelty in that the patent with such a claim tree has a value of “3” and is now a “parameter.” The instant specification states that *a specification having the deepest hierarchy is assigned the maximum value on the scale. This is based on the view that the deeper a claim hierarchy is, the more deeply speculated the inventive idea is (i.e., the inventive idea is fully devised from multiple aspects), and hence the higher its patent value* ([0122]). The instant specification does not offer substantiation for this view. It is unclear how the nesting level is used as a parameter to indicate the value of a patent. In other words, how is it that a patent is more valuable if it has a higher nesting value? Therefore, calling the level a patent value and parameter does not effectively serve to patentably distinguish the claimed invention over the prior art.

Conclusion

19. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEBRA ANTONIENKO whose telephone number is (571)270-3601. The examiner can normally be reached Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janice Mooneyham can be reached on 571-272-6805. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DA

/Janice A. Mooneyham/
Supervisory Patent Examiner, Art Unit 3689